

07026040 OBION RIVER AT U.S. HIGHWAY 51 NEAR OBION, TN

LOCATION.--Lat 36°14'27", long 89°13'03", Obion County, Hydrologic Unit 08010202, on right downstream bank, at end of main channel bridge on U.S. Highway 51, 3.2 mi northeast of Trimble, 2.0 mi southwest of Obion and 1.6 river miles downstream of the former gage location, Obion River at Obion.

DRAINAGE AREA.--1,875 mi².

PERIOD OF RECORD.--July 1929 to September 1958, October 1966 to September 1995, October 2001 to current year. Gage height and discharge records at this site from 1964 to 1975 are in reports of U.S. Army Corps of Engineers. Prior to Oct. 1990 published as "at Obion."

REVISED RECORD.--WSP 1211: 1930, 1943. WSP 2120: Drainage area.

GAGE.--Data collection platform. Datum of gage is 245.17 ft above NGVD of 1929. Prior to Oct. 1990 water-stage recorder at site 1.6 mi upstream at a datum 1.31 ft higher (levels by the U.S. Army Corps of Engineers). Prior to Oct. 1, 1932, nonrecording gage at site 1.6 mi upstream at datum 6.31 ft higher; Oct. 1, 1932 to Aug. 2, 1939, nonrecording gage, and Aug. 3, 1939, to Sept. 1958, water-stage recorder at site 1.6 mi upstream at datum 16.31 ft higher.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 99,500 ft³/s, Jan. 24, 1937 gage height, 40.4 ft present datum; minimum under conditions of no backwater, 230 ft³/s, Oct. 7-9, 1943, minimum daily discharge, 15 ft³/s, backwater from Mississippi River, Feb. 4, 1937, reverse flow of 57 ft³/s, measured by current meter on that date.

REMARKS.--Records fair, except for estimated discharges, which are poor. During high stages the recession side of peaks are affected by backwater, and return flow from flooded fields. These periods are shown as estimated and are considered poor.

COOPERATION.--Gage operated jointly with the Memphis District U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,300 ft³/s, March 30, 31, gage height 33.69 ft; minimum daily discharge, 621 ft³/s, Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	634	7,090	10,200	e8,000	1,510	2,310	e9,000	10,200	914	869	965	8,990
2	648	10,900	10,900	e7,010	1,470	2,080	e6,600	10,600	1,320	854	957	6,120
3	660	12,300	e9,000	10,500	2,140	1,960	e5,100	e8,300	1,410	840	952	3,550
4	646	14,600	e6,600	10,600	1,880	1,910	e4,100	e6,400	1,290	830	948	1,960
5	637	e12,500	e3,500	e6,000	1,610	1,860	e3,100	e5,000	1,160	864	940	1,440
6	622	e9,000	8,110	10,200	1,490	1,850	e2,500	e3,300	1,080	926	932	1,220
7	621	e5,800	10,100	10,900	1,730	1,890	6,520	2,740	1,010	857	977	1,110
8	622	e3,900	11,300	11,800	2,010	2,350	8,120	1,990	966	840	1,160	1,030
9	626	e2,500	11,700	12,300	1,910	2,070	7,210	1,750	1,950	828	1,050	928
10	630	e2,000	e9,200	e11,000	1,720	1,770	5,600	1,570	1,360	820	977	896
11	702	1,650	e6,800	e7,800	1,510	1,670	4,420	1,430	1,150	893	949	874
12	5,770	2,260	e4,200	e5,700	1,370	1,600	8,330	1,320	2,010	1,490	930	855
13	2,370	1,970	e3,500	e5,400	2,530	1,510	7,770	1,240	7,310	1,870	919	843
14	934	1,600	e2,900	9,750	4,860	1,420	5,670	1,540	4,920	1,940	912	834
15	825	1,530	2,310	e7,000	3,030	1,360	3,940	1,450	2,980	1,960	909	1,010
16	775	1,410	1,930	e5,400	2,190	1,380	2,700	1,140	2,240	2,530	925	2,120
17	733	1,300	1,720	e3,800	1,770	1,370	2,180	1,070	1,720	3,580	1,500	1,180
18	746	1,240	1,520	e2,800	1,480	1,350	1,890	1,040	1,410	2,780	1,720	979
19	6,610	2,150	1,430	2,450	1,370	1,340	1,640	1,030	1,220	1,500	1,400	929
20	7,120	2,010	1,350	2,160	1,410	1,310	1,480	1,020	1,090	1,560	1,190	897
21	3,670	1,470	1,310	1,940	6,150	1,290	1,470	1,040	1,010	1,480	1,140	872
22	1,770	1,300	4,570	1,720	8,690	1,360	3,980	1,010	942	1,290	1,080	878
23	2,000	1,450	7,840	1,540	8,450	3,330	6,510	992	918	1,260	1,060	843
24	7,000	6,740	5,570	1,420	e6,500	2,450	4,000	981	904	1,220	986	826
25	4,560	8,310	e3,470	1,400	e4,000	1,700	2,900	959	894	1,160	962	1,510
26	2,280	6,480	e2,440	1,400	e3,000	1,520	2,240	947	887	1,100	1,100	4,900
27	4,710	4,650	1,980	1,370	2,670	4,070	1,960	940	1,010	1,050	5,850	1,470
28	6,400	5,770	1,750	1,300	2,470	10,900	1,780	932	955	1,010	3,560	994
29	5,290	3,780	2,360	1,380	---	12,100	3,140	924	919	993	1,940	924
30	2,710	7,620	8,090	1,820	---	14,700	9,200	905	893	979	8,000	887
31	1,790	---	9,380	1,680	---	e11,000	---	898	---	970	10,200	---
TOTAL	75,111	145,280	167,030	167,540	80,920	98,780	135,050	74,658	47,842	41,143	57,090	51,869
MEAN	2,423	4,843	5,388	5,405	2,890	3,186	4,502	2,408	1,595	1,327	1,842	1,729
MAX	7,120	14,600	11,700	12,300	8,690	14,700	9,200	10,600	7,310	3,580	10,200	8,990
MIN	621	1,240	1,310	1,300	1,370	1,290	1,470	898	887	820	909	826
CFSM	1.29	2.58	2.87	2.88	1.54	1.70	2.40	1.28	0.85	0.71	0.98	0.92
IN.	1.49	2.88	3.31	3.32	1.61	1.96	2.68	1.48	0.95	0.82	1.13	1.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

	MEAN	1,028	2,135	3,788	4,709	4,886	4,353	3,890	3,054	1,905	1,403	1,062	974
MAX	5,352	15,500	22,140	26,640	17,120	15,810	11,770	15,540	10,970	4,783	6,643	5,041	
(WY)	(2003)	(1958)	(2002)	(1937)	(1990)	(1975)	(1973)	(1983)	(1970)	(1975)	(1971)	(1950)	
MIN	249	372	495	587	543	628	678	487	323	301	277	264	
(WY)	(1944)	(1955)	(1944)	(1944)	(1941)	(1941)	(1941)	(1936)	(1936)	(1944)	(1936)	(1956)	

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		*WATER YEARS 1929 - 2005	
ANNUAL TOTAL	976,149		1,142,313		2,762	
ANNUAL MEAN	2,667		3,130		5,351	
HIGHEST ANNUAL MEAN					569	
LOWEST ANNUAL MEAN					99,500	
HIGHEST DAILY MEAN	14,600	Nov 4	14,700	Mar 30	99,500	Jan 24, 1937
LOWEST DAILY MEAN	621	Oct 7	621	Oct 7	a15	Feb 4, 1937
ANNUAL SEVEN-DAY MINIMUM	629	Oct 4	629	Oct 4	233	Oct 6, 1943
MAXIMUM PEAK FLOW					99,500	Jan 24, 1937
MAXIMUM PEAK STAGE					b40.40	Jan 24, 1937
INSTANTANEOUS LOW FLOW					c230	Oct 7, 1943
ANNUAL RUNOFF (CFSM)	1.42		1.67		1.47	
ANNUAL RUNOFF (INCHES)	19.37		22.66		20.02	
10 PERCENT EXCEEDS	6,670		8,190		7,120	
50 PERCENT EXCEEDS	1,600		1,720		1,060	
90 PERCENT EXCEEDS	691		894		419	

* Statistics are based on the combination of present gage and gage prior to 1990 0702400 "at Obion" located 1.6 mi upstream of present location.

a Affected by backwater from Mississippi River.

b Present datum.

c Minimum under conditions of no backwater from Mississippi River.

e Estimated

